

CPC**COOPERATIVE PATENT CLASSIFICATION****D02G****CRIMPING OR CURLING FIBRES, FILAMENTS, THREADS, OR YARNS; YARNS OR THREADS****NOTE**

Attention is drawn to the note following the title of class [D02](#)

D02G 1/00

Producing crimped or curled fibres, filaments, yarns, or threads, giving them latent characteristics (yarns per se [D02G 3/00](#); during formation of artificial filaments, threads, or the like [D01D 5/22](#); general aspects of chemical treatment [D06M](#))

NOTE

In the context of this group, the terms "texturing" or "texturising" encompass curling and crimping

D02G 1/002

- . {by knitting, weaving or tufting, fixing and then unravelling}

D02G 1/004

- . {by heating fibres, filaments, yarns or threads so as to create a temperature gradient across their diameter, thereby imparting them latent asymmetrical shrinkage properties}

D02G 1/006

- . {by impinging the yarn against an uneven surface and thereby deforming it}

D02G 1/008

- . {with provision for imparting irregular effects to the yarn}

D02G 1/02

- . by twisting, fixing the twist and backtwisting, i.e. by imparting false twist

D02G 1/0206

- .. {by false-twisting}

D02G 1/0213

- ... {after drawing the yarn on the same machine}

D02G 1/022

- ... {while simultaneously drawing the yarn}

D02G 1/0226

- ... {multiple false-twisting}

D02G 1/0233

- ... {with real twist being imparted to the yarn before or after false-twisting}

D02G 1/024

- ... {with provision for imparting irregular effects to the yarn}

D02G 1/0246

- ... {at least some of the filaments being simultaneously broken or cut, e.g. by stretching or abrading}

D02G 1/0253

- ... {while bonding at least some of the filaments or fibres together}

D02G 1/026

- ... {in the presence of a crimp finish}

D02G 1/0266

- ... {false-twisting machines}

D02G 1/0273

- {threading up and starting the false-twisting machine}

D02G 1/028

- .. {by twisting or false-twisting at least two filaments, yarns or threads, fixing the twist and separating the filaments, yarns or threads}

D02G 1/0286

- .. {characterised by the use of certain filaments, fibres or yarns}

- D02G 1/0293 . . . {composed, at least in part, of natural fibres}
- D02G 1/04 . . Devices for imparting false twist
- D02G 1/06 . . . Spindles
- D02G 1/08 . . . Rollers {or other friction causing elements}
- D02G 1/082 {with the periphery of at least one disc}
- D02G 1/085 {between crossed belts}
- D02G 1/087 {between the flanks of rotating discs}

- D02G 1/10 . . using knife edges, e.g. heated knife edges, for edge crimping

- D02G 1/12 . . using stuffer boxes
- D02G 1/122 . . {introducing the filaments in the stuffer box by means of a fluid jet}
- D02G 1/125 . . {including means for monitoring or controlling yarn processing}
- D02G 1/127 . . {including drawing or stretching on the same machine}

- D02G 1/14 . . using grooved rollers or gear-wheel-type members

- D02G 1/16 . . using jets or streams of turbulent gases, e.g. air, steam {(interlacing filaments [D02J 1/08](#))}
- D02G 1/161 . . {yarn crimping air jets}
- D02G 1/162 . . {with provision for imparting irregular effects to the yarn}
- D02G 1/164 . . {in the presence of a liquid, e.g. a crimp finish}
- D02G 1/165 . . {characterised by the use of certain filaments or yarns}
- D02G 1/167 . . {including means for monitoring or controlling yarn processing}
- D02G 1/168 . . {including drawing or stretching on the same machine}

- D02G 1/18 . . by combining fibres, filaments, or yarns, having different shrinkage characteristics {([D02G 1/004](#) takes precedence)}

- D02G 1/20 . . Combinations of two or more of the above-mentioned operations or devices; After-treatments for fixing crimp or curl
- D02G 1/205 . . {After-treatments for fixing crimp or curl}

- D02G 3/00** **Yarns or threads, e.g. fancy yarns; Processes or apparatus for the production thereof, not otherwise provided for** (for producing crimped or curled yarns [D02G 1/00](#))

- D02G 3/02 . . Yarns or threads characterised by the material or by the materials from which they are made
- D02G 3/025 . . {Yarns or threads formed from hair (horse-hair threads [D02G 3/14](#))}
- D02G 3/04 . . Blended or other yarns or threads containing components made from different materials
- D02G 3/042 . . . {all components being made from natural material}
- D02G 3/045 . . . {all components being made from artificial or synthetic material}
- D02G 3/047 . . . {including aramid fibres}
- D02G 3/06 . . Threads formed from strip material other than paper
- D02G 3/08 . . Paper yarns or threads

- D02G 3/10 .. Yarns or threads formed from collagenous material, e.g. catgut {(surgical threads or yarns [A61L](#))}
- D02G 3/12 .. Threads containing metallic filaments or strips
- D02G 3/14 .. Horse-hair threads
- D02G 3/16 .. Yarns or threads made from mineral substances
- D02G 3/18 ... from glass or the like
- D02G 3/182 {the glass being present only in part of the structure}
- D02G 3/185 {in the core}
- D02G 3/187 {in the sheath}
- D02G 3/20 ... from asbestos

- D02G 3/22 . Yarns or threads characterised by constructional features, {e.g. blending, filament/fibre (piecing of yarns or threads [D01H 15/00](#))}
- D02G 3/24 .. Bulkied yarns or threads, e.g. formed from staple fibre components with different relaxation characteristics
- D02G 3/26 .. with characteristics dependent on the amount or direction of twist
- D02G 3/28 ... Doubled, plied, or cabled threads {([D02G 3/32](#), [D02G 3/36](#) take precedence; effect yarns [D02G 3/34](#); details of spindles, e.g. bearings [D01H 7/86](#))}
- D02G 3/281 {using one drawing frame for two slivers and twisting of the slivers to a single yarn, i.e. spin-twisting (guides having associated actuators with mutual action [D01H 13/1658](#))}
- D02G 3/283 {using hollow spindles through which one yarn is running}
- D02G 3/285 {one yarn running over the feeding spool of another yarn}
- D02G 3/286 {with alternatively "S" and "Z" direction of twist, e.g. Self-twist process}
- D02G 3/288 {with same direction of twist, but with an amount of twist varying along the thread}
- D02G 3/30 ... Crêped or other highly-twisted yarns or threads
- D02G 3/32 .. Elastic yarns or threads; {Production of plied or cored yarns, one of which is elastic}
- D02G 3/322 ... {using hollow spindles (details of spindles, e.g. bearings [D01H 7/86](#))}
- D02G 3/324 ... {using a drawing frame}
- D02G 3/326 ... {the elastic properties due to the construction rather than to the use of elastic material}
- D02G 3/328 ... {containing elastane}
- D02G 3/34 .. Yarns or threads having slubs, knops, spirals, loops, tufts, or other irregular or decorative effects, i.e. effect yarns {(carding machines for producing decorative or fancy effects in products [D01G](#); drafting machines with varying draft according to a pre-arranged pattern [D01H 5/36](#))}
- D02G 3/343 ... {using hollow spindles (details of spindles, e.g. bearings [D01H 7/86](#))}
- D02G 3/346 ... {with coloured effects, i.e. by differential dyeing process}
- D02G 3/36 .. Cored or coated yarns or threads {([D02G 3/34](#), [D02G 3/40](#) take precedence); elastic yarns or threads [D02G 3/32](#)}
- D02G 3/362 ... {using hollow spindles (details of spindles, e.g. bearings [D01H 7/86](#))}
- D02G 3/365 {around which a reel supporting feeding spool rotates}
- D02G 3/367 ... {using a drawing frame}
- D02G 3/38 .. Threads in which fibres, filaments, or yarns are wound with other yarns or

filaments, {e.g. wrap yarns, i.e. strands of filaments or staple fibres are wrapped by a helically wound binder yarn; ([D02G 3/32](#) takes precedence)}; (covering endless core threads with fibres by using open-end spinning techniques [D01H 4/00](#))

- D02G 3/385 . . . {using hollow spindles, e.g. making coverspun yarns}
- D02G 3/40 . . Yarns in which fibres are united by adhesives; Impregnated yarns or threads
- D02G 3/402 . . . {the adhesive being one component of the yarn, i.e. thermoplastic yarn}
- D02G 3/404 . . . {Yarns or threads coated with polymeric solutions}
- D02G 3/406 {where the polymeric solution is removable at a later stage, e.g. by washing}
- D02G 3/408 . . . {Flocked yarns}
- D02G 3/42 . . Chenille threads

- D02G 3/44 . Yarns or threads characterised by the purpose for which they are designed
{(protective gloves [A41D 19/00](#); protective clothing [A62B 17/00](#); ropes [D07B 1/02](#))}
- D02G 3/441 . . {Yarns or threads with antistatic, conductive or radiation-shielding properties
(electroconductive, anti-static or radiation-shielding filaments [D01F 1/09](#),
[D01F 1/106](#); anti-static fabrics [D03D 15/0005](#); conducting, insulating or anti-static
layers for floor coverings [D06N 7/0042](#))}
- D02G 3/442 . . {Cut or abrasion resistant yarns or threads}
- D02G 3/443 . . {Heat-resistant, fireproof or flame-retardant yarns or threads (fire- or flame-proof
filaments [D01F 1/07](#); woven fabrics using heat-resistant or fireproof threads
[D03D 15/12](#))}
- D02G 3/444 . . {Yarns or threads for use in sports applications (strings for tennis rackets
[A63B 51/02](#))}
- D02G 3/445 . . {Yarns or threads for use in floor fabrics (floor fabrics [A47G 27/00](#); floor coverings
on textile basis [D06N 7/0005](#))}
- D02G 3/446 . . {Yarns or threads for use in automotive applications}
- D02G 3/447 . . {Yarns or threads for specific use in general industrial applications, e.g. as filters or
reinforcement}
- D02G 3/448 . . {Yarns or threads for use in medical applications ([D02G 3/449](#) takes precedence;
surgical suture materials [A61L 17/00](#))}
- D02G 3/449 . . {Yarns or threads with antibacterial properties (filaments containing agents
inhibiting growth of micro-organisms [D01F 1/103](#))}
- D02G 3/46 . . Sewing-cottons or the like
- D02G 3/48 . . Tyre cords {(tyre reinforcements [B60C 9/00](#); metal cords for reinforcing rubber or
plastic articles [D07B 1/0606](#))}